



February 3, 2022

Board of Public Works & Safety  
City of Lafayette  
20 North 6<sup>th</sup> Street  
Lafayette, IN 47901

Dear Board Members:

You have before you Contract Amendment 1 with Structurepoint regarding Raineybrook Lift Station Design. The board approved the original contract on May 25, 2021. Since that time, the area serviced by the lift station has been identified as an area that will see additional residential growth. This amendment will provide engineering services to expand the capacity of the lift station and reroute the force main that discharges from the lift station.

Structurepoint will perform this work for a not-to-exceed increase of \$123,000, bringing the total contract amount to \$246,000.

The contract was reviewed by the City Attorney and I recommend it for your approval.

Respectfully,

A handwritten signature in black ink, appearing to read "Brad W. Talley".

Brad W. Talley  
Superintendent  
Lafayette Renew



## AMENDMENT NO. 1 TO OWNER-ENGINEER AGREEMENT

### 1. Background Data:

- a. **Effective Date of Owner-Engineer Agreement:** May 25, 2021
- b. **Owner:** City of Lafayette
- c. **Engineer:** American Structurepoint, Inc.
- d. **Project:** Raineybrook Lift Station Design

### 2. Nature of Amendment

- ☒ Additional Services to be performed by Engineer
- ☒ Modifications to Services of Engineer
- ☒ Modifications to Responsibilities of Owner
- ☒ Modifications to Payment to Engineer
- ☒ Modifications to Time(s) for rendering Services
- ☐ Modifications to other terms and conditions of the Agreement

### 3. Description of Modifications

Attachment 1, "Modifications"

**Owner and Engineer hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect. The Effective Date of this Amendment is the date of the latest required signature below.**

OWNER:

\_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date Signed: \_\_\_\_\_

ENGINEER:

\_\_\_\_\_

By: M. David Mohler II, PE, LEED AP

Title: Vice President

Date Signed: January 17, 2022

## Modifications

---

### EXHIBIT A

#### PART 1 – BASIC SERVICES

##### A1.06 *Lift Station Design*

1. Engineer shall perform the following Additional Services: The need for the additional services is to provide Owner the ability to serve a larger area by the Project (refer to Figure 1 for summary of areas to be served). The result of the additional service areas is that the lift station (LS) design will increase the rated capacity of the LS from 240-gpm to approximately 500-gpm. Additionally, the originally proposed force main discharge gravity sewer is incapable of handling the increased flow. Therefore, the revised design includes: A) conveyance of flows in a larger force main (FM) to a different location in the Owner's collection system that can convey the increased flow, and B) design of a gravity sewer to convey pumped flow from the LS as well as potential gravity flow from undeveloped properties on the NW corner of US HWY 231 S and W 500 S. Specific design components include the following:
  - a. Modify the LS design to increase the rated capacity of the LS from 240-gpm to approximately 500-gpm. Existing LS site to be utilized for larger LS.
  - b. Complete a preliminary utilities location evaluation on both the north and south sides of W 500 S to determine the impacts of existing utilities within the existing right-of-way (ROW). Goal of evaluation is to determine which side of W 500 S provides the most cost-effective route for the proposed FM. The information obtained during evaluation will be summarized in a technical memorandum to be provided to Owner for final selection of FM route.
  - c. Design approximately 4,000 LF of 8" FM to pump flow east along W 500 S to new gravity sewer MH at the NW corner of US HWY 231 S and W 500 S (refer to Figure 2). *(Note – the proposed force main route may shift to the south side of W 500 S based upon the results of the evaluation of existing utilities on both sides of W 500 S. Refer to item 1. b. above. Survey fee is the same regardless of which side the FM is installed.)*
  - d. Design approximately 1,800 LF of 10" gravity sewer to convey pumped flow and potential future gravity flow from undeveloped properties on the NW corner of US HWY 231 S and W 500 S to existing manhole structure (SAN-39D271; refer to Figure 2).
  - e. Provide topographical survey services for new FM and gravity sewer routes as indicated below.
  - f. Provide geotechnical services (6 bores total) as indicated in attached proposal from CTL Engineering, Inc. (refer to Attachment 1). *(Note – the proposed bore locations (3 each) along W 500 S may shift to the south side of W 500 S based upon the results of the evaluation of existing utilities on both sides of W 500 S. Refer to item 1. b. above. Geotechnical fee is the same regardless of which side the FM is installed.)*
  - g. Coordinate with Tippecanoe County (County) and the Indiana Department of Transportation (INDOT) to obtain permitting for construction phase and develop maintenance of traffic (MOT) plans as required by County and INDOT.



2. The Scope of Services currently authorized to be performed by Engineer in accordance with the Agreement and previous amendments, if any, is modified as follows:
- a. Design services as indicated above.
  - b. Survey: Topographic Survey ( $\pm 5,700$  LF) – American Structurepoint will prepare a Topographic Survey for the site including the following (refer to Figure 3):
    - i. Prepare survey and environmental notice for delivery by USPS
    - ii. Establish horizontal control (Indiana State Plane west)
      1. Provide 3 point reference ties
    - iii. Establish vertical control (NAVD “88”)
      1. Set temporary benchmarks on site to be used during construction
    - iv. Select topographic survey
      1. Show spot elevations to the nearest 0.01 foot
      2. Provide the location, size and elevation of all improvements within the survey limits
      3. Plot the location of storm drainage structures including up and down stream, sanitary structures including up and down stream, roads, driveways, edges of curbs, parking areas, walks, drainage ways, fencing, etc.
      4. Provide the location and size of individual trees outside of wooded areas larger than 6” DBH within the survey limits
      5. Plot the location of the drip line of all groups of tree and vegetation where locating individual trees is not feasible
      6. Roadway Topography
    - v. Provide location, size, depth, material and direction of flow for sanitary and storm sewers on the site
    - vi. Locate aboveground evidence of utilities on site, plus marks made on the ground by local utility companies (One Call). One Call will only locate utilities within the public right-of-way or within recorded easements
    - vii. CAD Drafting and creation of a TIN and contours (1-foot contour interval)
    - viii. Location Control Route Survey Plat (Deed/parcel plot based on limited research obtained from the County Recorders)
    - ix. Professional Surveyor review
    - x. Survey Limits as indicated below:



- c. Geotechnical Services: Six (6) geotechnical bores will be completed along the proposed force main and gravity sewer routes as indicated in attached proposal from CTL Engineering, Inc. dated December 14, 2021 (refer to Attachment 1). The bore locations are as indicated in Figure 3.
- d. Electrical and Control Design Services: The following additional design services will be provided in relation to the electrical and controls portion of this Project:
  - i. Revise current design to accommodate a change in pump motor horsepower. This will include revisions to the 1) power one-line diagram, 2) motor control details, 3) motor circuits, 4) power circuits, 5) circuit breakers, and 6) control panel.
- e. Bidding Phase – not changed.
- f. Construction Phase – not changed.

The schedule for rendering services is modified as follows:

#### A1.02 Preliminary Design Phase

- 8. Furnish three review copies of the Technical Memorandum for preliminary utilities location evaluation to Owner within 30 calendar days of authorization to proceed with this phase, and review them with Owner. Within 10 calendar days of receipt, Owner shall submit to Engineer any comments regarding the Technical Memorandum and any other deliverables. This task will be utilized to establish the proposed force main route along W 500 S for design, survey and geotechnical evaluation purposes.

### Exhibit A, Part 2 – Additional Services

**If requested by Owner, Engineer will provide the following service(s):**

**BB. Right-of-Way Services:** Engineer will provide the following services, as directed by Owner, for each parcel requiring these services. There is a total of 35 parcels potentially requiring right-of-way services (refer to Figure 4). Engineer will design proposed force main and gravity sewer so as to limit the number of parcels requiring right-of-way services.

- i. Engineer shall prepare legal descriptions, route survey plats and/or right-of-way parcel plats, and other materials to be used in the acquisition of right-of-way in accordance with 865 IAC 1-12.
- ii. Engineer shall compare and study in detail all of the title information and survey data and shall calculate or otherwise determine all other data as may be necessary for writing the legal description of every right-of-way parcel.
- iii. Engineer may, with prior written approval of Owner, undertake additional title research in order to resolve errors or omissions in provided abstracting, as may be deemed necessary by OWNER for the purpose of completing the work included in this contract.
- iv. Engineer may, with the prior approval of Owner, undertake field surveys for the purpose of checking title of plat data and/or for the acquisition of vital locative and boundary information which is not contained in existing records, as may be



considered necessary to complete fully and satisfactorily the work included in this contract.

- v. Each land plat and each sheet of legal description issued by Engineer shall be dated and shall bear the signature and seal of the Registered Land Surveyor (Indiana) by whom the same is prepared, or under whose personal supervision the same is prepared by its regularly employed subordinates, and for which he/she takes full responsibility.
- vi. Right-of-Way Staking – Engineer will provide a one-time staking of the proposed right-of-way for each parcel during the land acquisition process.
- vii. Title Research Services – A Title and Encumbrance Report will be provided for each permanent right-of-way parcel. The Title and Encumbrance Report will be created by adequately researching all available records and documenting the research to identify all parties or entities having any ownership interest in the property to be acquired, including an abstract of all pertinent data, legal descriptions, all liens (taxes, mortgages, and recorded judgments), assessments, taxes, and any encumbrances against the property. A Title and Encumbrance Report will be provided for each temporary right-of-way parcel that contains the deed of record for the current fee owner, documentation for any sell-offs and contiguous property, and current tax information. When requested, the Engineer shall provide title work from the date of the original Title and Encumbrance Report to the present date.

**Except as expressly amended by this Amendment, all of the terms of the Agreement shall remain in full force and effect.**

#### **EXHIBIT B**

- 3. The responsibilities of Owner are modified as follows:
  - Q.** Owner will provide property acquisition services. If required, Engineer shall provide right-of-way engineering assistance as outline in Exhibit A, Part 2, Paragraph BB of this document. Fees for such services shall be negotiated with Owner after determination of right-of-way engineering requirements.
  - R.** Owner determines discharge location of LS flows in existing collection system.

#### **EXHIBIT C**

- 4. For the Additional Services or the modifications to services set forth above, Owner shall pay Engineer the following additional or modified compensation:
  - A.** Engineer's total compensation under this Agreement shall not exceed ~~\$122,800~~ **\$246,000** per the breakdown below, unless and until a supplemental agreement is executed.

B. Owner shall pay Engineer for Basic Services set forth in Exhibit A as follows:

1. An amount equal to the cumulative hours charged to the Project by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class for all services performed on the Project, plus Reimbursable Expenses and Engineer's Consultant's charges, if any, not to exceed \$185,700 based on the following distribution of compensation. The following is a breakdown of the fees required to complete the amended scope of work. Table 1 provides additional information regarding the original and amended fees.

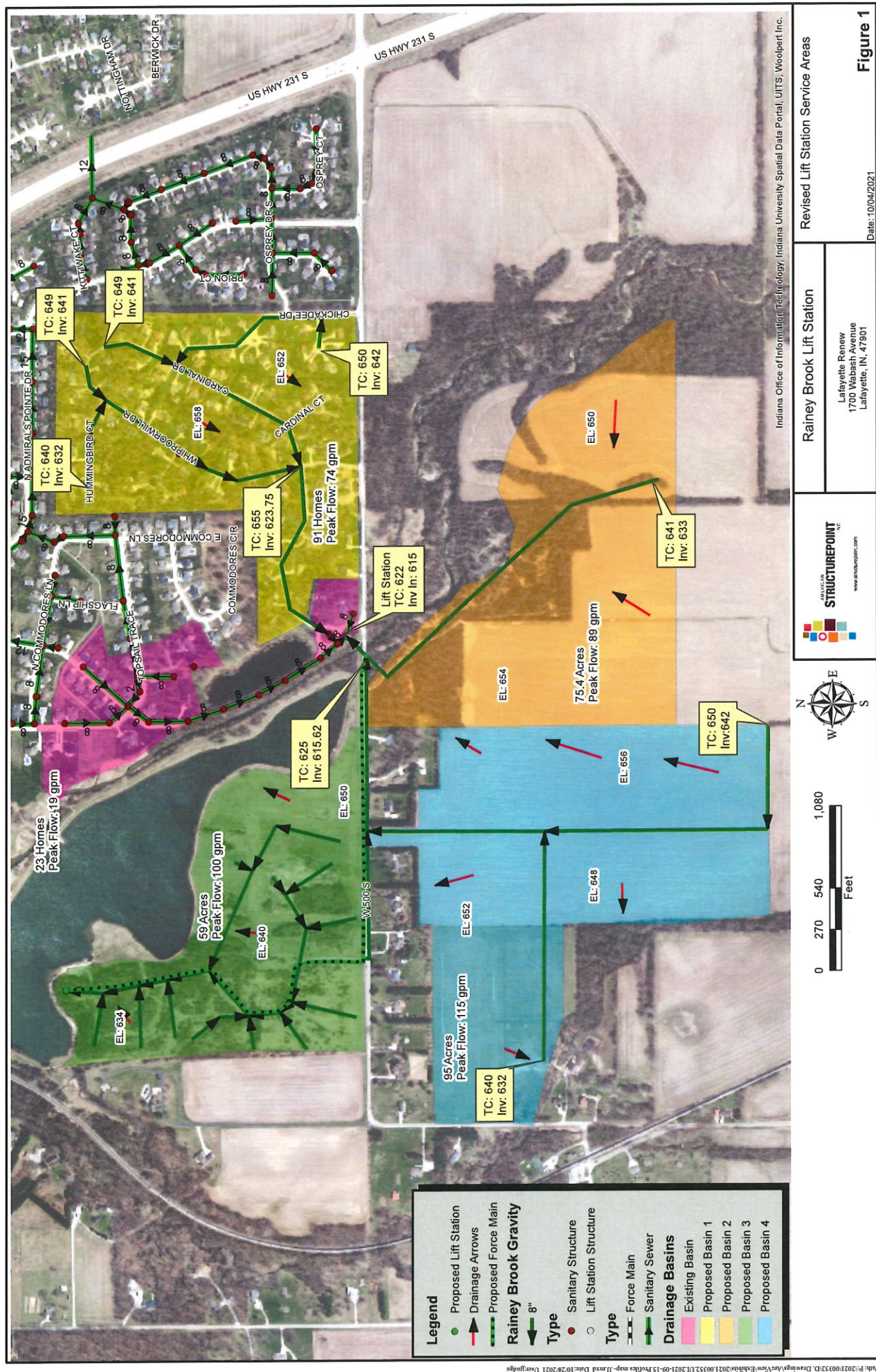
a.	Preliminary Design Phase	\$78,400
b.	Final Design Phase	\$69,900
c.	<b>Right-of-Way Engineering Services</b>	<b>\$TBD (if requested)</b>
d.	Bidding Phase	\$8,000
e.	Construction Phase – Administration	\$29,400
f.	Total Fee – Amended Scope	\$185,700
g.	Fee Remaining Prior to Amending Scope	\$62,500. <sup>1</sup>
h.	Total Additional Fee (Amendment No. 1)	\$123,200 (Item f. – Item g.)

**Table 1: Summary of Original and Revised Budgets**

Description	Original Fee	Budget Remaining Prior to Scope Change	New Effort for Revised Scope	Amendment Fee <sup>1</sup>	Revised Fee
Preliminary Design	\$54,400		\$78,400		
Final Design	\$31,000		\$69,900		
Total Design	\$85,400	\$25,100	\$148,300	\$123,200	\$208,600
Bidding Phase	\$8,000		\$8,000		
Construction Phase - CA	\$29,400		\$29,400		
Total (Bid + CA)	\$37,400	\$37,400	\$37,400		\$37,400
Total Contract	\$122,800	\$62,500			\$246,000

<sup>1</sup> Any and all unused fees remaining from the original \$122,800 contract amount will be utilized and applied as part of revised overall fee.

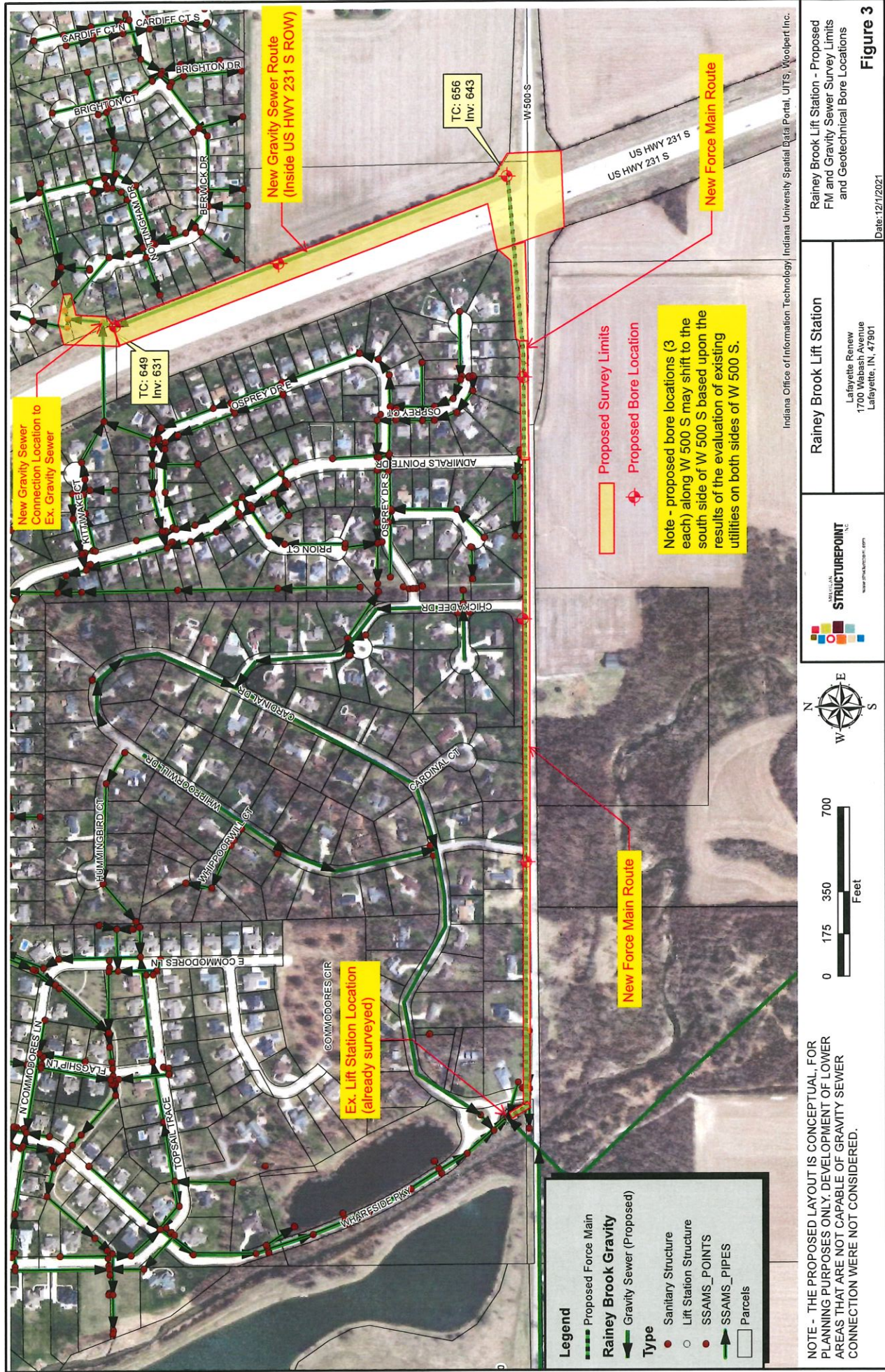




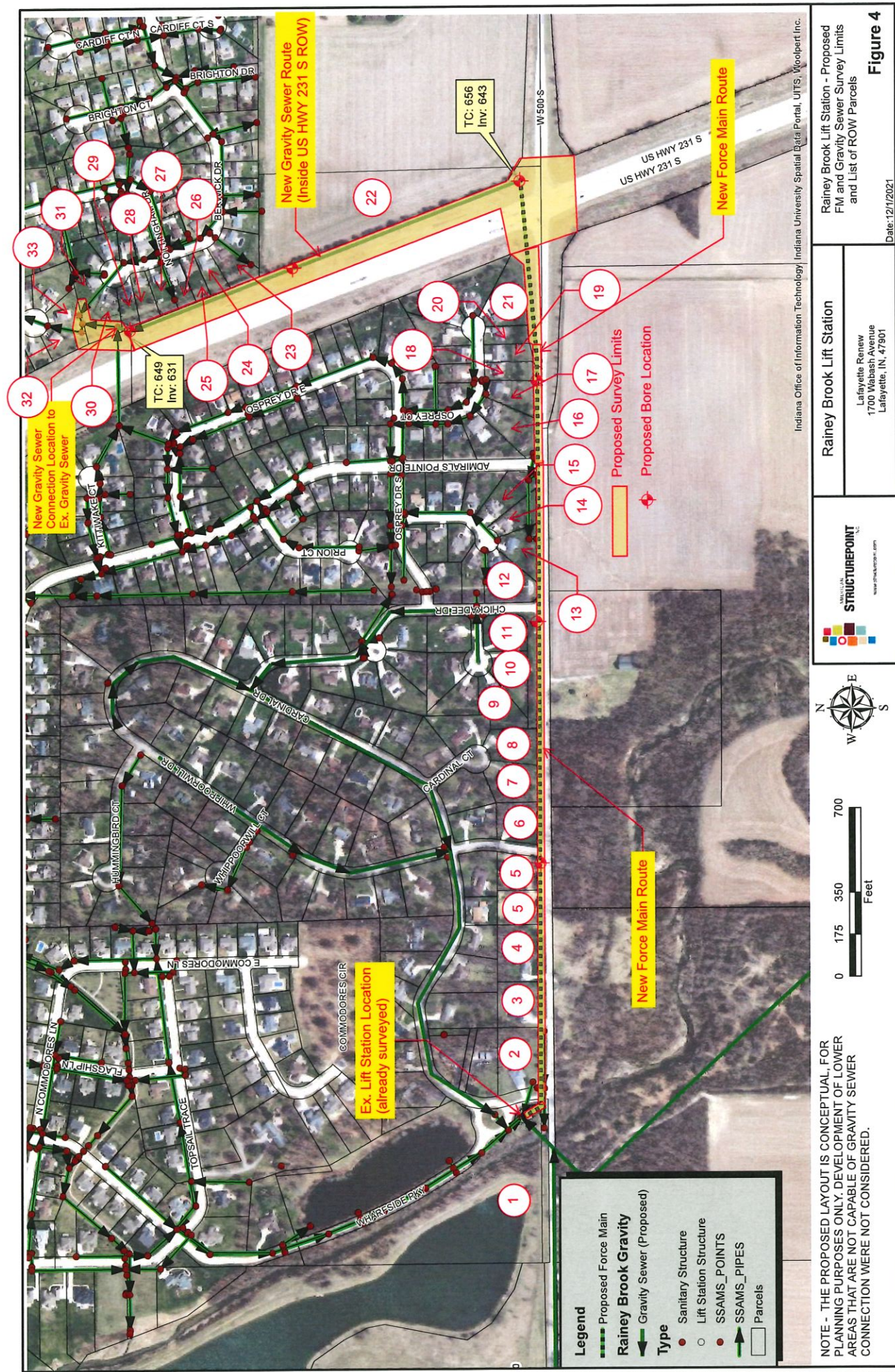














**CTL Engineering, Inc.**  
1310 S. Franklin Road  
Indianapolis, Indiana 46239  
Phone: (317) 295-8650 • Fax: (317) 295-8395  
[www.ctleng.com](http://www.ctleng.com)



---

*Consulting Engineers – Testing – Inspection Services – Analytical Laboratories*

December 14, 2021

American Structurepoint  
9025 River Road, Suite 200  
Indianapolis, IN 46240

Attention: Mr. Bob Henricksen, PE  
Technical Director, Utility Infrastructure Group

Reference: Geotechnical Investigation  
Rainey Brook - Force Main and Gravity Sewer  
Lafayette, IN  
CTL Proposal No.: 21050180INDP

Dear Mr. Henricksen:

CTL Engineering, Inc. is pleased to submit this proposal for providing geotechnical investigation services on the above referenced project site.

### ***SCOPE OF WORK***

---

The project involves the design and construction of a new force main and gravity sewer as part of the Rainey Brook lift station project near the intersection of Cardinal Drive and W 500 S in Lafayette, Indiana. The work covered by this proposal consists of drilling six (6) soil borings to a depth of 20 feet each, soil sampling, laboratory testing and geotechnical recommendations.

### ***PROCEDURES***

---

The following items will be included in the general services provided by CTL Engineering, Inc.

- A. Contact Indiana Underground Utility Protection Services to locate underground utilities at the test boring location.
- B. Coordinate the field work with American Structurepoint and Lafayette Renew personnel.
- C. Obtain an INDOT ROW permit for drilling along US 231.
- D. Drilling the test borings at or near the locations defined by American Structurepoint.
- E. Field and laboratory testing in accordance with ASTM specifications.



- F. Engineering evaluation and reporting to include:
1. Boring logs and soil profile to include:
    - a. Thickness of fill and subsurface soil stratum.
    - b. Groundwater encountered during drilling and at completion.
    - c. Standard penetration as a function of depth.
  2. Existing subsurface conditions at the boring locations.
  3. General site preparation and earthwork recommendations.
  4. Soil parameters required for the design of the force main and gravity sewer.

### ***CLOSING***

---

Based on the amount of work anticipated, it is estimated that the fees for performing the requested services is \$10,331.00. All fees will be billed at the unit rates shown on the attached Fee Schedule. This fee is contingent on execution of a final agreement under the terms and conditions of the contract as provided. This proposal is firm for a period of one year. After one year, the proposal shall be reconfirmed by the parties as to availability and pricing. If the total cost should exceed the estimated fee due to unforeseen soil conditions, we will contact you to obtain approval prior to performing the additional work.

We appreciate the opportunity to submit this proposal and look forward to working with you. If you have any questions or need further information, please call our office at (317) 295-8650.

Sincerely,

**CTL ENGINEERING, INC.**



---

Shawn M. Marcum, PE  
Senior Project Engineer

Geotechnical Investigation  
 Rainey Brook - Force Main and Gravity Sewer  
 Lafayette, IN  
 CTL Proposal No.: 21050180INDP  
 12/14/2021

## FEE SCHEDULE

### Field Testing

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization/Demobilization	1	LS	\$1,000.00	\$1,000.00
Drilling: 6 to 20'	120	Foot	\$23.00	\$2,760.00
Shelby Tube	2	Each	\$75.00	\$150.00
Boring Backfill	6	Each	\$50.00	\$300.00
INDOT ROW Permint	1	LS	\$80.00	\$80.00
Traffic Control with Flaggers	1	Day	\$900.00	\$900.00
<b>Subtotal Field Testing</b>				<b>\$5,190.00</b>

### Laboratory Testing

Description	Quantity	Unit	Unit Cost	Total Cost
Split Spoon soil samples (Visual Description + moisture content testing)	48	Each	17.00	816.00
Unconfined Compressive Strength	2	Each	75.00	150.00
Atterberg Limits	5	Each	85.00	425.00
Grain Size Analysis	5	Each	90.00	450.00
<b>Subtotal Laboratory Testing</b>				<b>\$1,841.00</b>

### Engineering and Reporting

Description	Quantity	Unit	Unit Cost	Total Cost
Drilling Supervisor	8	Hour	110.00	880.00
Test Boring Preparation	4	Hour	65.00	260.00
Project Engineer	12	Hour	130.00	1,560.00
Senior Geotechnical Engineer, PE	4	Hour	150.00	600.00
<b>Subtotal Engineering and Reporting</b>				<b>\$3,300.00</b>

<b>ESTIMATED TOTAL FEE</b>	<b>\$10,331.00</b>
----------------------------	--------------------

